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September 16, 2004

Ms. Rebecca Wenner
Kansas Department of Health and Environment
Bureau of Waste Management
1000 SW Jackson, Suite 430
Topeka, Kansas 66612-1367

473510



RCRA RECORDS

RE: Response to Compliance Letter dated August 20, 2004
Robbie Manufacturing, Inc.
EPA ID Number KSD 054080148

Dear Ms. Wenner:

The purpose of this letter is to respond to the Kansas Department of Health and Environment (KDHE) hazardous waste follow-up inspection on August 5, 2004 at the Robbie Manufacturing, Inc. (Robbie) facility located in Lenexa, Kansas. The following addresses the additional violation cited in the letter to Robbie dated August 20, 2004, and the status of the prior citations.

Applicability of 40 CFR Subpart BB to Printing Press Solvent Handling Systems

According to the your letter dated August 20, 2004, Robbie is currently meeting the requirements for 40 CFR subpart CC, Air Emission Standards for Tanks, Surface Impoundments, and Containers at the facility; however, KDHE believes the facility is subject to 40 CFR subpart BB, Air Emission Standard for Equipment Leaks. While the facility is a large quantity generator and is therefore potentially subject to these provisions, after reviewing the current operating set up at the facility, Robbie believes that subpart BB does not apply to the printing press solvent systems. The following explains the current operation of the pumps and associated piping and containers, as well as why Robbie believes that subpart BB standards do not apply to these processes. The waste solvent totes associated with these processes are subject to and comply with the provisions of 40 CFR subpart CC.

During the last two years, Robbie has installed two new printing machines (e.g., machines V8 and V9) that have built-in, fully automatic, solvent control systems what allow the machines to reuse cleaning solvent within the process three times before discharging a portion of the solvent from the machines, which is replaced by virgin solvent. Installation of these presses has significantly reduced the amount of waste solvent generated by the printing processes. The pumps and associated piping used to introduce, recirculate and remove solvent from these two printing machines are inherent to the process (e.g., the piping is necessary to add, recirculate, and remove solvent from the process and ultimately convey it to the waste solvent storage totes). The pumps used to circulate clean solvent within the presses are the same ones used to discharge a portion of the solvent in the press to a waste storage tote after the solvent has been used for three cleaning cycles in the printing machines. Since common equipment is used to process and

convey both new and used solvent into and out of the process, it is Robbie's position that ink contaminated solvent discharged from the presses is not considered a waste until it is removed from the process (i.e., placed into the waste solvent storage tote). This position is supported by the provisions of §261.4(c), which states the following:

"A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipe line, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under parts 262 through 265, 268, 270, 271 and 124 of this chapter or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials."

It is Robbie's position that solvent removed from presses V8 and V9 are not "generated" until placed in the waste solvent tote attached to each press. This position is further supported by an EPA memo, dated 3/17/2004 (see Attachment A). While the memo is primarily directed at questions and answers related to satellite accumulation containers, the response to question 13 applies to any storage container attached to a process discharging hazardous waste. The memo clearly states that containers attached to process equipment that discharges hazardous waste are considered the "point of generation" for the hazardous waste. This being the case, subpart BB does not apply to any part of the process prior to the waste solvent storage totes at Robbie. The purpose of this exemption on process equipment is to allow the waste to be removed from the process equipment so that the process equipment itself is not subjected to RCRA regulations.

While Robbie believes that the equipment associated with conveying solvent from the presses to the totes is exempt from RCRA provisions under §261.4(c), the equipment is also specifically exempted from the provisions of subpart BB due to the limited amount of time it is in contact with hazardous waste. After spent solvent has been pumped to the waste storage tote, any solvent remaining in the pipe on the discharge side of the pump will drain back into the press solvent system, or to the waste solvent storage tote. Based on the pump capacities and the amount of waste solvent generated, the total run time for each system to pump solvent to the waste storage totes is significantly less than 300 hours per year. As stated in 40 CFR Subpart BB, 265.1050(e):

"Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year is excluded from the requirements of 265.1052 through 265.1060 of this subpart if it is identified, as required in 265.1064(g)(6)."

Thus the pumps and piping are excluded from the requirements of 265.1052 through 265.1060. In addition, each of the waste storage totes and pipe connections are sealed. There is a pressure relief valve mounted on each tote to prevent the rupture of the storage container during the fill cycle. Furthermore, the printing presses and waste storage totes are located within the building premises and access into the building is through locked doors. The facility is a major source of VOC emissions operating under a Class I Air Operating Permit, permit number 0910055. According to permit condition C1 (see Attachment B), the regenerative thermal oxidizer (RTO) must operate whenever a printing press is in operation. The RTO is designed to remove over 99% of the VOC's in the gas stream from the presses. Air from the presses is pulled from other areas within the building premises including the area around the pumps, piping and waste storage

totes. Thus, any VOC emissions leaking from the system discharging to the waste storage totes will be captured and destroyed by the RTO.

Actions Taken to Address Container Management Since Initial Inspection

With respect to the violations noted, during the June 29, 2004 inspection, additional training has been provided and work practices have been implemented to ensure that all containers of hazardous waste in storage are properly marked with the words "Hazardous Waste" and marked with the accumulation start date.

Since the root cause of the problems identified during your initial inspection resulted from a short-term re-arrangement of duties (i.e., the person normally assigned the responsibility for management of material sent to the solvent room was assigned to fill in for a press operator for less than a week), additional staff have been identified, trained and assigned responsibility for ensuring that any small satellite containers from the press area are immediately emptied into 55-gallon storage drums in the solvent room.

Furthermore, each press operator has been re-trained to mark the words "Hazardous Waste" on each satellite pail used to accumulate ink/solvent waste at each press. All press operators have also been re-instructed on the proper closure of all satellite containers except when waste is being added or removed.

In order to prevent future violations related to containers in the solvent room, the solvent room has been designated a less than 90-day storage area. All containers in this area will be marked "Hazardous Waste" and immediately marked with the accumulated start date (containers for the still bottoms and used ink will continue as satellite containers due to the significant amount of time required to accumulate 55 gallons of waste). The area has been added to the weekly 90-day hazardous waste storage area inspection form, and to the contingency plan. It should be noted that prior to your inspection, the containers in the ink mix room were all considered satellite containers and therefore did not require an accumulation start date until full.

Regarding the 55-gallon drum used by the laundry contractor for solvent centrifuged from rags, a 55-gallon satellite container dedicated to the activity has been placed in the ink mix room which is located near the shipping dock. This container is under the direct control of the ink mix room attendant, and is properly marked with the words "Hazardous Waste." The contractor has been instructed to notify the mix room attendant when solvent rags are centrifuged in order that the ink mix room attendant will ensure that the container in which the solvent is placed is properly marked and managed as a satellite hazardous waste container.

Ms. Rebecca Wenner - Page 4
September 10, 2004

If you have any further questions or concerns related to this letter, please call me at (913) 492-3400, or Curtis Lesslie of Trinity Consultants at (913) 390-9700.

Sincerely,

ROBBIE MANUFACTURING, INC.

A handwritten signature in cursive script that reads "George Jones".

George Jones
Project Leader

Attachments

P:\0417104 - ROBBIE TV\CORRES\LET_KDHE1.DOC

ATTACHMENT A

3/17/2004 EPA MEMO REGARDING POINT OF GENERATION

FOUND AT:

[HTTP://YOSEMITE.EPA.GOV/OSW/RCRA.NSF/DOCUMENTS/8C9F6DC8B378A2F585256E](http://YOSEMITE.EPA.GOV/OSW/RCRA.NSF/DOCUMENTS/8C9F6DC8B378A2F585256E)

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MEMORANDUM

SUBJECT: Frequently Asked Questions about Satellite Accumulation Areas

FROM: Robert Springer, Director

Office of Solid Waste

TO: RCRA Directors, EPA Regions 1-10

Purpose

The purpose of this memo is to reiterate and clarify the Environmental Protection Agency's (EPA) regulations under the Resource Conservation and Recovery Act (RCRA) hazardous waste management program regarding satellite accumulation areas (SAAs). For convenience, this memo pulls together answers to many of the frequently asked questions EPA receives regarding SAAs. Many, but not all, of the questions in this memo have been answered by EPA in previous letters and documents. For those questions that have been answered previously, citations to relevant memos and Federal Register preambles are provided in numbered endnotes.

Summary of Generator Accumulation Regulations

When accumulating hazardous waste on-site, large quantity generators (LQGs) must comply with 40 CFR 262.34(a) and small quantity generators (SQGs) must comply with 40 CFR 262.34(d) to avoid the requirement to obtain a hazardous waste treatment, storage, or disposal permit.^a LQGs may accumulate hazardous waste on-site without interim status or a permit for up to 90 days, while SQGs have up to 180 days to accumulate hazardous waste without interim status or a

permit.^b The Agency sometimes refers to these generator accumulation areas as "90-day" or "180-day" areas, or "central accumulation" areas.

The satellite accumulation provisions allow generators to accumulate up to 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) in containers that are:

- at or near any point of generation, and
- under the control of the operator,

with fewer requirements than for central accumulation areas, provided the generator complies with the requirements of 262.34(c).

When a generator accumulates hazardous waste on-site in containers, the regulations for 90-day areas, 180-day areas and SAAs all refer generators to the container management standards in Part 265 Subpart I. The table below identifies the sections of Part 265 Subpart I that must be followed in each case:

Table 1
Container Management Standards for Generators

Section of Part 265 Subpart I		Satellite accum. area	180-day area (SQG)	90-day area (LQG)
265.171	Condition of containers	YES	YES	YES
265.172	Compatibility of waste with containers	YES	YES	YES
265.173	(a) Keep closed, except when adding/removing waste	YES	YES	YES
	(b) Handle containers to avoid ruptures and leaks	no	YES	YES
265.174	Inspections	no	YES	YES
265.176	Special requirements of ignitable or reactive wastes	no	no	YES
265.177	Special requirements for incompatible wastes	no	YES	YES
265.178	Air emission standards	no	no	YES

In addition to the container standards indicated above, the regulations for both SQGs and LQGs have requirements for container labeling; personnel training ; preparedness and prevention; emergency procedures; and waste analysis plans when treating hazardous waste on-site to meet the land disposal restriction (LDR) treatment standards. LQGs also must have contingency plans while SQGs must not accumulate more than 6000 kg of hazardous waste on-site at any one time.

In contrast, additional requirements for SAAs are limited to:

1. Generators must label satellite containers of hazardous waste with the words “Hazardous Waste” or “with other words that identify the contents of the containers.” (262.34(c)(1)(ii))
2. When a generator accumulates more than 55 gallons of hazardous waste (or 1 quart of acute hazardous waste), the generator must (262.34(c)(2)):
 - mark the container with the date on which 55 gallons (or 1 quart of acute hazardous waste) is exceeded, and
 - remove the excess of 55 gallons (or 1 quart of acute hazardous waste) within three days or comply with the 90-day area or 180-day area regulations, as appropriate.

Frequently Asked Questions about Satellite Accumulation Areas

1. Question : Can small quantity generators establish SAAs according to 262.34(c) for their hazardous waste?

Answer : Yes. Both LQGs and SQGs may take advantage of the reduced requirements while hazardous waste is in SAAs, provided it is managed in accordance with all the provisions of 40 CFR 262.34(c).¹ If an SQG or LQG accumulates more than 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) at an SAA, the excess must be removed within

three days. If after that period, the excess is not removed, LQGs must comply with 262.34(a) and SQGs must comply with 262.34(d), with respect to the excess amounts.

2. Question : If a generator accumulates more than 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) at an SAA, when should the generator date the container(s)? When 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) is exceeded, or when the container is moved to the central accumulation area?

Answer : When 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) is exceeded in an SAA, the generator needs to date the container, so that the generator can move the excess to the 90-day or 180-day area within three days (262.34(c)(2)). Then when 3 days have passed, or when the container is moved to the central accumulation area, the generator needs to date the container again, so that it can be moved off-site within 90 or 180 days (262.34(a)(2) and 262.34(d)(4), respectively. (Of course, the container does not need to be dated after it is removed from the SAA if the excess waste is moved directly to a permitted or interim status unit.) This means that an LQG has up to 93 days and a SQG has up to 183 days for on-site accumulation time once 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) has been exceeded at the SAA - up to three days in the SAA, followed by up to 90 or 180 days in the central accumulation area.²

3. Question : When a generator accumulates more than 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) at an SAA, the excess of 55 gallons (or the excess of 1 quart of acute hazardous waste) needs to be removed from the SAA within three days. What is meant by "three days"?

Answer : Three days means three consecutive days. It does not mean three working days or three business days. Originally, the Agency had proposed to use 72 hours as the time limit but realized that determining when 72 hours had elapsed would have required placing both the date and time of day on containers. In the final rule the Agency switched to using three days so that generators only need to date containers that hold the excess of 55 gallons of hazardous waste (or 1 quart of acute hazardous waste).³

4. Question : If an SAA has a full 4-gallon container of hazardous waste, does the generator have to remove the container from the SAA within three days of being filled?

Answer : No. There is no federal requirement that full containers of hazardous waste be removed from an SAA within three days of being filled. Only the excess of 55 gallons of hazardous waste (or the excess of 1 quart of acutely hazardous waste) must be removed within three days.

5. Question : The container management standards of 265.173(a) state, "A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste." Does this mean that hazardous wastes have to be managed and/or disposed in the containers in which they were originally accumulated?

Answer : No. Generators may transfer hazardous waste between containers to facilitate storage, transportation, or treatment.⁴ For example, a generator may wish to consolidate

several partially full containers of the same hazardous waste from an SAA into one container before transferring it to a central accumulation area. Generators also may transfer hazardous waste between containers in central accumulation areas. However, the

90-day or 180-day “clock” for accumulation does not restart if the hazardous waste is transferred to another container.

6. Question : Do containers in SAAs have to comply with the air emission standards of Part 265 Subparts AA, BB, and CC?

Answer : No. Containers in SAAs are not required to comply with the air emission standards of Part 265 Subparts AA, BB, and CC.⁵ Likewise, SQGs are not required to comply with the air emission standards at their 180-day accumulation areas. LQGs, however, are required to comply with the RCRA air emission standards at their 90-day accumulation areas. Therefore, when an LQG transfers waste from an SAA to a 90-day central accumulation area, the applicable portions of the air emission standards of Part 265 Subparts AA, BB, and CC must be met at the 90-day central accumulation area.

7. Question : Section 265.174 of Subpart I requires that containers be inspected at least weekly for leaks and deterioration caused by corrosion or other factors. Both LQGs and SQGs must inspect containers in their central accumulation areas. Are SQGs or LQGs required to inspect hazardous waste containers in SAAs?

Answer : No. Inspections of containers (whether weekly or some other frequency) in SAAs are not required, so long as the provisions of 262.34(c) are met.⁶ Section 265.174, which requires inspections, is not among the provisions listed in 262.34(c) for SAAs (see Table 1). However, the SAA regulations do require that waste containers in an SAA must be under the control of the operator of the process generating the waste, in good condition (265.171), compatible with its contents (265.172), and closed except when adding or removing waste (265.173), which should achieve the goal of inspections: containers that are free of leaks and deterioration.

8. Question : SQGs must conduct training in accordance with 262.34(d)(5)(iii) and LQGs must conduct training in accordance with 265.16. Do the RCRA regulations require training of personnel working in SAAs?

Answer : No. The RCRA regulations do not require training of personnel working in SAAs.⁷ Personnel that have access to or work in central accumulation areas, including those that move hazardous waste from a SAA to a central accumulation area, must be trained. As the ones actually generating hazardous waste, however, personnel working in SAAs need to be familiar enough with the chemicals with which they are working to know when they have generated a hazardous waste so that it will be managed in accordance with the RCRA regulations.

9. Question : The preamble to the final rule that added 262.34(c), states, “...only one waste will normally be accumulated at each satellite area.”⁸ Can there be more than one hazardous waste at an SAA? Can there be more than one container at an SAA?

Answer : Yes. It's permissible to have more than one hazardous waste in an SAA. Likewise, it's permissible to have more than one container of hazardous waste in an SAA. The regulations do not limit the number of hazardous wastes or the number of containers that can be placed in an SAA. The regulations limit only the total volume of hazardous waste at a single SAA to 55 gallons (or 1 quart of acute hazardous waste). If there are multiple containers of hazardous waste in an SAA, each container must be labeled in accordance with 262.34(c)(1)(ii).

Because the Agency did not anticipate that generators would accumulate multiple hazardous wastes/containers in an SAA, a cross-reference to the requirements for the safe storage of incompatible wastes was not included as part of the container management standards for SAAs. Nevertheless, good management practices clearly dictate that incompatible wastes should be stored separately. Furthermore, in the event that any wastes, including incompatible wastes, are stored in such a way that they may pose an imminent and substantial threat to health or the environment, §7003 of RCRA allows the Agency to take enforcement action to eliminate the threat.

10. Question: Can a facility have multiple SAAs?

Answer : Yes. The regulations do not limit the total number of SAAs at a generator's facility. Likewise, the regulations do not limit the total amount of hazardous waste that can be accumulated at various SAAs across a facility. The regulations limit only the volume of hazardous waste that can be accumulated at a single SAA to 55 gallons (or 1 quart of acute hazardous waste).

It's not possible in a memo for the Agency to delineate for all situations what constitutes a single SAA versus what constitutes separate SAAs. The regulations state that a generator may accumulate hazardous waste "in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste." For additional guidance about the Agency's intent, refer to the preamble to the final rule for SAAs, which states, "Certainly...a row of full 55 gallon drums spaced 5 feet apart along the factory wall," is not a row of distinct SAAs, but is one SAA.⁹

11. Question : If a facility has multiple SAAs, can hazardous waste be moved from one SAA to another?

Answer: No. Generators may not move hazardous wastes between SAAs.¹⁰ Once a hazardous waste leaves an SAA, it must be destined for a central accumulation area that is regulated under 262.34(a) or (d) or for final treatment or disposal at a facility with a permit or interim status.

However, a single SAA may have multiple points of generation. Movement or consolidation of hazardous waste within an SAA is permissible, as long as it remains "at or near" the "point of generation" and "under the control of the operator of the process generating the waste."

In addition, a generator may have more than one 90-day or 180-day central accumulation area, and the regulations do not prohibit the movement of hazardous waste from one fully regulated central accumulation area to another, as long as the hazardous waste remains on-site. However, the 90-day or 180-day “clock” for accumulation does not restart if the hazardous waste is moved to another central accumulation area.

12. Question : Do generators have to include the hazardous waste in SAAs in the monthly quantities for determining generator status (i.e., SQG or LQG)?

Answer : Yes. Generators must include all the hazardous waste in the various SAAs in their monthly quantities for determining generator status.¹¹ Sections 261.5(c) and (d) identify hazardous wastes that do not have to be counted when determining generator status. Hazardous waste stored in SAAs is not on this list; therefore, hazardous waste in SAAs must be included in the generator’s monthly quantity determination.

13. Question : When a facility has equipment that discharges hazardous wastes to attached containers, do the containers that collect such wastes have to be in compliance with the SAA regulations?

Answer : Yes. Even if the discharging unit is not regulated under RCRA, the attached containers that collect hazardous wastes from such equipment must be in compliance with the SAA regulations, if those containers collect wastes that are listed or characteristic hazardous wastes. Waste containers in SAAs must be:

- in good condition (265.171)
- compatible with their contents (265.172)
- labeled with “words that identify the contents of the container” or the words “hazardous waste” (262.34(c)(1)(ii)).

In addition, the containers in SAAs must be closed, except when adding or removing hazardous waste (265.173(a)). Generators would not be required to keep such containers closed while hazardous waste is being added to the container; but generators would need to keep them closed when the hazardous waste is not being discharged to the attached container.

The container(s) attached to such equipment is a point of generation. It is possible for there to be multiple pieces of equipment within one SAA, and thus multiple points of generation within a single SAA, provided all the pieces of equipment are “at or near” each other and “under the control of the operator of the process generating the waste.” Under this scenario, the total amount of hazardous waste in the SAA would be limited to 55 gallons (or 1 quart of acute hazardous waste) and a generator would be allowed to consolidate like hazardous wastes from multiple discharging units.

14. Question : If a facility has very small containers (e.g., vials or tubes) of hazardous waste that are too small to label with the words “hazardous waste” or “other words that identify the contents of the container,” how should the containers be labeled?

Answer : Generally, we would expect the small containers to be placed in properly labeled larger containers, which would have the added benefit of secondary containment should the small containers break. However, other approaches that would achieve the same result also would be acceptable.

Additional Information

Please note that this letter discusses only the federal hazardous waste regulations. States that are authorized to implement the RCRA program may have regulations that are different than the federal regulations provided they are not less stringent than the federal program. Please consult your state regulatory requirements. If you have questions about the federal hazardous waste regulations discussed in this memo, please contact Kristin Fitzgerald at (703) 308-8286 or Fitzgerald.Kristin@epa.gov

Endnotes for Q&A Portion of FAQ

^a Generators of ≥ 1000 kg/month of hazardous waste or >1 kg/month of acute hazardous waste are large quantity generators (LQGs). Generators of >100 kg/month but <1000 kg/month of hazardous waste are small quantity generators (SQGs). Generators of ≤ 100 kg/month of hazardous waste and ≤ 1 kg/month of acute hazardous waste are conditionally exempt small quantity generators (CESQGs) and are regulated under 40 CFR 261.5. The regulations for CESQGs are not discussed in this memo.

^b Small quantity generators who must transport hazardous waste >200 miles for treatment, storage or disposal may accumulate waste on-site for 270 days without a permit or interim status (262.34(e)). Large quantity generators of F006 may accumulate hazardous waste on-site for 180 days without a permit or interim status provided the conditions of 262.34(g)(1)-(4) are met.

1. April 1990; RCRA/Superfund Hotline Monthly Report; RCRA Online #13365.
2. October 1990; RCRA/Superfund Hotline Monthly Report; RCRA Online #13410.
3. December 20, 1984; 49 FR 49568; Final Rule; Docket # RCRA-1984-0028.
4. November 1, 1993; Weddle to Ware; RCRA Online #11791.
5. February 1996; RCRA/Superfund Hotline Monthly Report; RCRA Online #13777.
6. December 1999; RCRA/Superfund Hotline Monthly Report; RCRA Online #14418
7. December 20, 1984; 49 FR 49570; Final Rule; Docket # RCRA-1984-0028.
8. December 20, 1984; 49 FR 49570; Final Rule; Docket # RCRA-1984-0028.
9. December 20, 1984; 49 FR 49569; Final Rule; Docket # RCRA-1984-0028.

10. February 1999; RCRA/Superfund Hotline Monthly Report; RCRA Online #14337.
11. February 10, 1994; Shapiro to Dolce; RCRA Online #11812.

To obtain Federal Register notices, search EPA's E-docket at www.epa.gov/edocket.

To obtain references other than Federal Register notices, search RCRA Online at www.epa.gov/rcraonline.

ATTACHMENT B

Section C of Class I Operating Permit 0910055